

WHAT IS CLAIMED IS:

1. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is physically formed,
and

copyright protection information by digital watermarking is embedded in the main information.

2. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is formed by pits, a depth of the pits being formed according to the additional information, and

copyright protection information by digital watermarking is embedded in the main information.

3. The optical recording medium according to claim 2, wherein:

the pits include a first pit having a first depth and a second pit having a second depth, and

when a wavelength of a reproduction light beam is

λ and a refractive index of the optical recording medium is n , the first depth is less than $\lambda/4n$, and the second depth exceeds $\lambda/4n$.

4. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is formed by pits,

all of the pits have an equal depth and are formed at a position shifted from a regular pit position in a track direction according to the additional information, and

copyright protection information by digital watermarking is embedded in the main information.

5. An optical recording medium in which an error correcting code with respect to main information is provided in the form of pits by a unit of error correcting code block,

wherein:

information in plural predetermined regions in the error correcting block, which is the main information corresponding to the error correcting code, is changed and recorded as the main information, and

copyright protection information by digital watermarking is embedded in the main information.

6. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for reproducing the main information are recorded, the additional information being physically formed, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

7. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that

the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for reproducing the main information are recorded, the additional information being formed by pits, a depth of the pits being formed according to the additional information, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

8. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for

reproducing the main information are recorded, the additional information being formed by pits, a depth of the pits being formed according to the additional information, the main information being embedded with copyright protection information by digital watermarking, the pits further including a first pit having a first depth and a second pit having a second depth, the first depth being less than $\lambda/4n$ and the second depth exceeding $\lambda/4n$ where λ is a wavelength of a reproduction light beam and n is a refractive index of the optical recording medium, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

9. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for

reproducing the main information are recorded, the additional information being formed by pits, all of the pits having an equal depth and being formed at a position shifted from a regular pit position in a track direction according to the additional information, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

10. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which an error correcting code with respect to main information is provided in the form of pits by a unit of error correcting block, information in plural predetermined regions in the error correcting block, which is the main information corresponding to the error correcting

